WHAT IS CLAIMED IS:

1. A system for managing a passive network device from a remote location over a distributed computer network, comprising:

a partner device in communication with a cooperating device over a data network using a first communication channel;

a managed element connected to said data network and listening to data traffic on said data network, said managed element being transparent to said data network;

a management center connected to said data network and listening to data traffic on said data network, said management center being transparent to said data network;

said managed element and said management center exchanging data units with one another only indirectly over a second communication channel integrated with said first communication channel, said data units being sent through said first communication channel addressed to at least one of said partner device and said cooperating device and being trapped by at least one of said managed element and said management center through the second communication channel.

2. The system as set forth in claim 1, wherein said partner device communicates with said cooperating device through a plurality of intermediate systems.

3. The system as set forth in claim 2, wherein said partner device and said cooperating device run full communication stacks, and each of said plurality of intermediate systems runs a subset of said full communication stacks.

4. The system as set forth in claim 3, wherein said full communication stacks include a network interface card, a network layer, a transport layer and an application layer.

5. The system as set forth in claim 4, wherein said subset of said intermediate systems includes a network interface card and a network layer.

6. The system as set forth in claim 4, wherein said subset of said intermediate systems includes a network interface card, a network layer and a transport layer.

7. The system as set forth in claim 3, wherein said managed element and said management center each include a service provider having a host layer, a transmission layer, a validation layer and a management service layer.

8. The system as set forth in claim 7, wherein said management service layer concatenates a management header to a received data unit, said header including at least one of a timestamp, a source address and a destination address.

9. The system as set forth in claim 7, wherein respective application processes run by said managed element and said management center communicate with one another over a service interface which defines a plurality of primitives.

10. The system as set forth in claim 9, wherein in response to intercepting a command send primitive from said management center, said managed element replies with a response send primitive which is trapped by said management center.

11. The system as set forth in claim 9, wherein said managed element can communicate unsolicited information to said management

center by conveying data addressed to one of said partner device and said cooperating device using a trap send primitive which is intercepted by said management center using a trap receive primitive.

12. The system as set forth in claim 1, wherein said managed element is a passive network device.

13. A method for managing a passive network device from a remote location over a distributed computer network, comprising the steps of:

establishing a first communication channel between a partner device and a cooperating device over a data network;

connecting a managed element to said data network such that said managed element can listen to data traffic on said data network, said managed element being transparent to said data network;

connecting a management center to said data network such that said management center can listen to data traffic on said data network, said management center being transparent to said data network;

establishing a second communication channel between said managed element and said management center, said second communication channel integrated with said first communication channel;

initiating a request from said partner and directing said request to said cooperating device over said first communication channel;

detecting, by said management center and said managed element, said request;

fabricating, by said managed element, an answer to said request, said answer addressed to said partner and having a source address of said managed element;

pushing said answer onto the network; and

intercepting, by said management center, said answer.

14. The method as set forth in claim 13, further comprising the steps of:

intercepting, by said managed element, a command send primitive from said management center; and

pushing, by said managed element, a response onto the network with a response send primitive which is trapped by said management center.

15. The method as set forth in claim 13, further comprising the steps of:

conveying, by said managed element, unsolicited information to said management center by conveying data addressed to one of said partner device and said cooperating device using a trap send primitive; and

intercepting, by said management center, said information through a trap receive primitive.

16. The method as set forth in claim 13, wherein each of said management center and said managed element includes a host layer, a transmission layer, a validation layer and a management service layer, said method further comprising, when sending a packet, the steps of:

concatenating, by said management service layer, a header to a data unit, said header including at least one of a timestamp, a destination address, and a source address;

forwarding the header and data unit to said validation layer;

appending an authentication code to and encrypting said packet;

passing the encrypted packet in binary format to said transmission layer;

transforming said binary format into ASCII and building a network packet suitable for said host layer;

passing the network packet to said host layer; and

inserting said network packet into a transmit queue.

17. The method as set forth in claim 13, wherein each of said managed element and said management center includes a host layer, a transmission layer, a validation layer and a management service layer, said method further comprising, when receiving a packet, the steps of:

monitoring, by said host layer, the network for a packet matching a predefined pattern;

filtering out an appropriate packet;

forwarding the packet to the transmission layer;

inserting, in response to determining that the packet is a data unit, the data unit into a reception queue;

converting the data unit into binary format;

forwarding the binary data unit to said validation layer; and

computing, by said validation layer, a packet key and decrypting the data unit.